EBIO-116 – Freshman seminar on local biology research, Spring 2016

Instructor: Emily Schultz
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Office: ABL 119D
Office hours: Mondays 10:00-11:00am

Schedule- Tuesdays (1:00 pm) for first six weeks of the semester.

Week 1: January 12th – No class

Week 2: January 19th – Introduction/Overview; Looking for primary scientific literature; Reading primary literature.

Week 3: January 26th – Discuss paper; Visit lab. --Kohn/Egan lab

Week 4: February 2nd –Intro to stats --Miller lab

Week 5: February 9th – Paper discussion; Visit lab. --Rudolf lab

Week 6: February 16th – Oral presentations. End of class. Saturday zoo visit

Week 7: February 23rd – Deadline for blog assignment submission; No class

Week 7 ½: February 26th – Deadline for blog comment submission; No class.

Grading- Grading for this 1 credit hour course is as follows: 50% for assignments and 50% for participation (that includes attendance). Active participation (you should have read the paper enough to discuss it at high level) is expected at every meeting as is attendance at each meeting.

Disabilities- Any student requiring accommodation in this class is encouraged to talk to instructor and also contact the Director of Disabled Student Services.

Honor code- Collaboration with classmates is encouraged in this class, but all work must be you own. Correctly and clearly attribute your sources of information (be they outside research, websites or something your neighbor said in class). Any questions about a potential violation of Rice University Honor Code should be brought to my attention immediately.

Assignment 1: Oral presentation of a paper of your choice!
Date: 02/16/2016

Continuing our theme of developing science communication skills and demonstrating understanding of primary literature, for your next assignment, you need to give a short 12 min oral presentation for a general audience summarizing a research paper from any of the labs in EEB program. (You should present as if the research was done by you.) Your presentation should include Power-point slides. Please let me know what paper you select.

Please email me your pdf version of presentation no later than 3:00pm on 02/26/2015.

You will be graded based on this rubric.

Criteria	**Good**	**Fair**	**Poor**
Completeness of information (General background, specific question, summary of methods, important results, interpretation/importance of results, future work)	6	5	3
Accuracy of information	6	5	3
How well organized was the presentation?	5	4	2
How clear was the information being presented?	5	4	2
How smooth was the speaker's delivery?	4	3	2
How clear were the slides?	4	3	2
Total	**30**	**24**	**14**

Please refer to this link for tips on how to give effective scientific talks. (Highly recommended)

https://www.asp.org/education/EffectivePresentations.pdf

Optional: For participation points: You are encouraged to ask questions at the end of your friends' presentations.

Assignment 2: Writing a science blog!
Deadline: 9:00am 02/23/2016

The purpose of this assignment is to get you to start thinking about scientific research on your own and developing science communication skills.

Science blogs can be written in different styles depending upon who is your target audience. For this assignment, I want you to consider your freshman (biology/non-biology major) peers as your audience.

Show them your excitement about the scientific research through your blog!

For this assignment, you will use either of the two papers discussed in class.

Your blog will be graded based on this rubric. (Tip: Use this as a guide)

Category	**Scoring criteria**	**Good**	**Fair**	**Poor**	**Not attempted**
Scientific accuracy	Completely accurate; all facts precise and explicit.	10	7	5	0
Critical thinking	Include highly original, constructive and creative thoughts, critique or opinion.	10	7	5	0
Organization	Well organized, logical format that was easy to follow; flowed smoothly from one idea to another.	5	3	2	0
Sentence structure and mechanics	All sentences were well constructed. No errors in spelling, grammar.	2.5	1.5	1	0
Bibliography	Is complete in proper format.	2.5	1.5	1	0
Total		**30**	**20**	**14**	**0**

There are a lot of resources on-line about how to write a science blog that you can look up. For example:

http://www.theguardian.com/science/series/secrets-science-writing - recommended
http://scienceofblogging.com/how-to-write-a-good-research-blog-post/ -good but a little lengthy.
http://www.mindthesciencegap.org/style-guide/good-practice-guide-for-writing-science-blog-posts/ -for a quick glance.

If you need help, don't hesitate to ask.

Required: For participation points: You need to read your friends' blog posts (at least 2) and comment